

subgrant agreement, or amendments thereto. The use of third-party in-kind contributions must be approved in advance by the FHWA Division Administrator and may not be made retroactive prior to approval of the work program/scope of work or an amendment thereto. The State DOT or subrecipient is responsible for ensuring that the following additional criteria are met:

(1) The third party performing the work agrees to allow the value of the work to be used as the match;

(2) The cost of the third party work is not paid for by other Federal funds or used as a match for other federally funded grants/subgrants;

(3) The work performed by the third party is an eligible transportation planning or RD&T related activity that benefits the federally funded work;

(4) The third party costs (*i.e.*, salaries, fringe benefits, etc.) are allowable under the applicable Office of Management and Budget (OMB) cost principles (*i.e.*, OMB Circular A-21, A-87, or A-122);¹

(5) The third party work is performed during the period to which the matching requirement applies;

(6) The third party in-kind contributions are verifiable from the records of the State DOT or subrecipient and these records show how the value placed on third party in-kind contributions was derived; and

(7) If the total amount of third party expenditures at the end of the program period is not sufficient to match the total expenditure of Federal funds by the recipient/subrecipient, the recipient/subrecipient will need to make up any shortfall with its own funds.

(c) In accordance with the provisions of 23 U.S.C. 120(j), toll revenues that are generated and used by public, quasi-public, and private agencies to build, improve, or maintain highways, bridges, or tunnels that serve the public purpose of interstate commerce may be used as a credit for the non-Federal share of an FHWA planning and research funded project.

¹OMB Circulars are available on the Internet at <http://www.whitehouse.gov/omb/circulars/index.html>.

(d) In accordance with 23 U.S.C. 505(c) or 23 U.S.C. 104(f)(3), the requirement for matching SPR or PL funds may be waived if the FHWA determines the interests of the Federal-aid highway program would be best served. Waiver of the matching requirement is intended to encourage State DOTs and/or MPOs to pool SPR and/or PL funds to address national or regional high priority planning or RD&T problems that would benefit multiple States and/or MPOs. Requests for waiver of matching requirements must be submitted to the FHWA headquarters office for approval by the Associate Administrator for Planning and Environment (for planning activities) or the Associate Administrator for Research, Development, and Technology (for RD&T activities). The matching requirement may not be waived for NHS, STP, or MG funds.

(e) NHS, STP, or MG funds used for eligible planning and RD&T purposes must be identified separately from SPR or PL funds in the work program(s) and must be administered and accounted for separately for fiscal purposes. In accordance with the statewide and metropolitan planning process requirements for fiscally constrained transportation improvement program (TIPs) planning or RD&T activities funded with NHS, STP, or MG funds must be included in the Statewide and/or metropolitan TIP(s) unless the State DOT and MPO (for a metropolitan area) agree that they may be excluded from the TIP.

(f) Payment shall be made in accordance with the provisions of 49 CFR 18.21 or 49 CFR 19.22.

§ 420.121 What other requirements apply to the administration of FHWA planning and research funds?

(a) *Audits.* Audits of the State DOTs and their subrecipients shall be performed in accordance with OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations.² Audits of for-profit contractors are to be performed in accordance with State DOT or subrecipient contract administration procedures.

²See footnote 1.

(b) *Copyrights.* The State DOTs and their subrecipients may copyright any books, publications, or other copyrightable materials developed in the course of the FHWA planning and research funded project. The FHWA reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for Government purposes.

(c) *Disadvantaged business enterprises.* The State DOTs must administer the transportation planning and RD&T program(s) consistent with their overall efforts to implement section 1001(b) of the Transportation Equity Act for the 21st Century (Pub. L. 105-178) and 49 CFR part 26 regarding disadvantaged business enterprises.

(d) *Drug free workplace.* In accordance with the provisions of 49 CFR part 29, subpart F, State DOTs must certify to the FHWA that they will provide a drug free workplace. This requirement may be satisfied through the annual certification for the Federal-aid highway program.

(e) *Equipment.* Acquisition, use, and disposition of equipment purchased with FHWA planning and research funds by the State DOTs must be in accordance with 49 CFR 18.32(b). Local government subrecipients of State DOTs must follow the procedures specified by the State DOT. Universities, hospitals, and other non-profit organizations must follow the procedures in 49 CFR 19.34.

(f) *Financial management systems.* The financial management systems of the State DOTs and their local government subrecipients must be in accordance with the provisions of 49 CFR 18.20(a). The financial management systems of universities, hospitals, and other non-profit organizations must be in accordance with 49 CFR 19.21.

(g) *Lobbying.* The provisions of 49 CFR part 20 regarding restrictions on influencing certain Federal activities are applicable to all tiers of recipients of FHWA planning and research funds.

(h) *Nondiscrimination.* The non-discrimination provisions of 23 CFR parts 200 and 230 and 49 CFR part 21, with respect to Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987, apply to all

programs and activities of recipients, subrecipients, and contractors receiving FHWA planning and research funds whether or not those programs or activities are federally funded.

(i) *Patents.* The State DOTs and their subrecipients are subject to the provisions of 37 CFR part 401 governing patents and inventions and must include or cite the standard patent rights clause at 37 CFR 401.14, except for § 401.14(g), in all subgrants or contracts. In addition, State DOTs and their subrecipients must include the following clause, suitably modified to identify the parties, in all subgrants or contracts, regardless of tier, for experimental, developmental or research work: "The subgrantee or contractor will retain all rights provided for the State in this clause, and the State will not, as part of the consideration for awarding the subgrant or contract, obtain rights in the subgrantee's or contractor's subject inventions."

(j) *Procurement.* Procedures for the procurement of property and services with FHWA planning and research funds by the State DOTs must be in accordance with 49 CFR 18.36(a) and (i) and, if applicable, 18.36(t). Local government subrecipients of State DOTs must follow the procedures specified by the State DOT. Universities, hospitals, and other non-profit organizations must follow the procedures in 49 CFR 19.40 through 19.48. The State DOTs and their subrecipients must not use FHWA funds for procurements from persons (as defined in 49 CFR 29.105) who have been debarred or suspended in accordance with the provisions of 49 CFR part 29, subparts A through E.

(k) *Program income.* Program income, as defined in 49 CFR 18.25(b) or 49 CFR 19.24, must be shown and deducted from total expenditures to determine the Federal share to be reimbursed, unless the FHWA Division Administrator has given prior approval to use the program income to perform additional eligible work or as the non-Federal match.

(l) *Record retention.* Recordkeeping and retention requirements must be in accordance with 49 CFR 18.42 or 49 CFR 19.53.

(m) *Subgrants to local governments.* The State DOTs and subrecipients are

responsible for administering FHWA planning and research funds passed through to MPOs and local governments, for ensuring that such funds are expended for eligible activities, and for ensuring that the funds are administered in accordance with this part, 49 CFR part 18, Uniform Administrative Requirements for Grants and Agreements to State and Local Governments, and applicable OMB cost principles. The State DOTs shall follow State laws and procedures when awarding and administering subgrants to MPOs and local governments and must ensure that the requirements of 49 CFR 18.37(a) have been satisfied.

(n) *Subgrants to universities, hospitals, and other non-profit organizations.* The State DOTs and subrecipients are responsible for ensuring that FHWA planning and research funds passed through to universities, hospitals, and other non-profit organizations are expended for eligible activities and for ensuring that the funds are administered in accordance with this part, 49 CFR part 19, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations, and applicable OMB cost principles.

(o) *Suspension and debarment.* (1) The State DOTs and their subrecipients shall not award grants or cooperative agreements to entities who are debarred or suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549 of February 18, 1986 (3 CFR, 1986 Comp., p. 189); and

(2) The State DOTs and their subrecipients shall comply with the provisions of 49 CFR part 29, subparts A through E, for procurements from persons (as defined in 49 CFR 29.105) who have been debarred or suspended.

(p) *Supplies.* Acquisition and disposition of supplies acquired by the State DOTs and their subrecipients with FHWA planning and research funds must be in accordance with 49 CFR 18.33 or 49 CFR 19.35.

Subpart B—Research, Development and Technology Transfer Program Management

§ 420.201 What is the purpose of this subpart?

The purpose of this subpart is to prescribe requirements for research, development, and technology transfer (RD&T) activities, programs, and studies undertaken by State DOTs and their subrecipients with FHWA planning and research funds.

§ 420.203 How does the FHWA define the terms used in this subpart?

Unless otherwise specified in this part, the definitions in 23 U.S.C. 101(a) and subpart A of this part, are applicable to this subpart. As used in this subpart:

Applied research means the study of phenomena to gain knowledge or understanding necessary for determining the means by which a recognized need may be met; the primary purpose of this kind of research is to answer a question or solve a problem.

Basic research means the study of phenomena, and of observable facts, without specific applications towards processes or products in mind; the primary purpose of this kind of research is to increase knowledge.

Development means the systematic use of the knowledge or understanding gained from research, directed toward the production of useful materials, devices, systems or methods, including design and development of prototypes and processes.

Final report means a report documenting a completed RD&T study or activity.

Intermodal RD&T means research, development, and technology transfer activities involving more than one mode of transportation, including transfer facilities between modes.

Peer exchange means a periodic review of a State DOT's RD&T program, or portion thereof, by representatives of other State DOT's, for the purpose of exchange of information or best practices. The State DOT may also invite the participation of the FHWA, and other Federal, State, regional or local